DON Data Management and Interoperability Strategy

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Agenda

- Background
- DON CIO Implementation Plan
- Draft SECNAVINST on Data Management and Interoperability (DM&I)
- DON DM&I Strategic Plan
- DON DM&I Integrated Product Team

Background

- DON CIO Enterprise Architecture & Standards
  - Develop the DON Information Technology Architecture (ITA) IAW OMB Guidance
  - Board of Representatives Chartered IPTs
    - Information Technology Standards Guidance (ITSG)
    - Information Technology Infrastructure Architecture (ITIA)
- DON IM/IT Strategic Plan
  - www.doncio.navy.mil
  - Goal 1 - Provide Information Technology Infrastructure
  - Objective 1.4 “Collaboratively develop, maintain, and facilitate the implementation of cohesive DON data, data flow and systems architectures.”

Planning Meeting Conclusions

- Data problems are not unique to any one functional area or organization.
- There is a need for policy, process, supporting infrastructure, and a plan to focus and unify efforts.
- These efforts in turn should be identified in the financial planning process to ensure adequate resources are allocated based upon DON priorities.
- The current acquisition process, especially in a IT age, does not address data adequately.
- A DON sponsored IPT is required to develop an implementation plan. The overall goal is to manage data as an enterprise resource.

DON CIO Implementation Plan

- Develop a SECNAVINST on Data Management and Interoperabilty (DM&I) to define policy, roles, and responsibilities (AUG 99 - DEC 99; DRAFT RELEASED 15 SEP FOR INFORMAL REVIEW).
- Develop a DON Data Management and Interoperability Strategic Plan to implement the policy (JUL 99 - NOV 99; DRAFT TO BE RELEASED 30 SEP FOR INFORMAL REVIEW).
- Develop specifications and concept of operations for a DON meta-data repository (AUG 99 - MAR 00).
- Implement data management processes and procedures (OCT 99 - SEP 00).
- Provide assured and interoperable data services for data access, storage and retrieval (OCT 99 - ongoing).

Draft SECNAVINST on DM&I: Policy

- Unify DON data management efforts...
- Establish a DON data management and interoperability infrastructure...
- Implement data management processes and procedures...
- Provide assured and interoperable data services for data access, storage and retrieval...
- Reduce the life-cycle cost of data...
- Ensure data infrastructure and requirements are appropriately funded...

Draft SECNAVINST on DM&I: Roles and Responsibilities

- DON CIO
- ASN (RDA)
- Comptroller
- CNO and CMC
  - Issue joint instruction/order to implement
  - Coordinate w/ DON CIO to identify priorities
  - Appoint Navy and USMC Data Administrators
- Resource and Program Sponsors
- Functional Data Managers
- SYSCOMs, PEOs, and DRPMs
- Fleet CINCs
- Navy Center for Tactical Systems Interoperability (NCTSI)
- COMOPTEVFOR and MCOTEA
- Chief of Naval Education & Training (CNET)

DM&I Strategic Plan

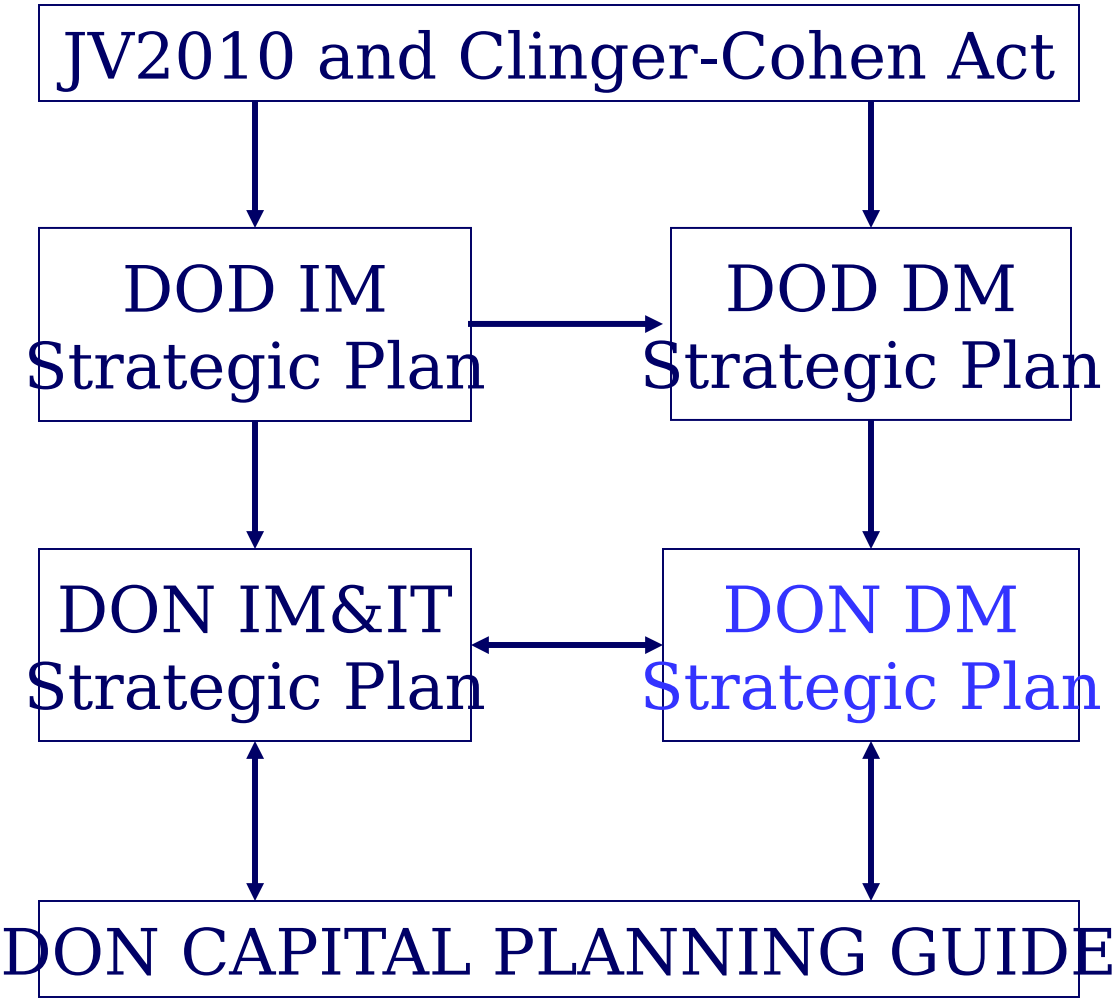
- Mission: Manage data as an enterprise resource to support DOD and DON IM and IT goals and objectives.
- Vision: Provide global, affordable, and timely access to shared, interoperable, reliable and secure data that enables maritime information superiority.
- Goals:
  - Unify Data Management & Interoperability efforts
  - Provide DM&I processes (requirements, funding, data registration, CM, IT assessment, standardization, conflict resolution)
  - Provide DM&I Systems Metadata Repository/Tools
  - Provide DON Data Architecture
  - Reduce life-cycle costs (standards, consolidation, unique interfaces)
  - Provide assured and interoperable data services (data metrics)

DM&I Integrated Product Team

- Develop an implementation plan for the DON DM&I Strategic Plan
- Participation by BOR - identified SMEs
- Stand up IPT by mid-October via virtual vote by BOR
- Focus on:
  - processes
  - products (authoritative data sources, metadata baseline, DON data architecture, data standards)
  - metrics

Back Up

Strategic Planning Framework


JV2010 and Clinger-Cohen Act
DOD IM Strategic Plan
DOD DM Strategic Plan
DON IM&IT Strategic Plan
DON DM Strategic Plan
DON CAPITAL PLANNING GUIDE

DOD DM Strategic Plan

Goals

- 1. Data Requirements
- 2. Data Availability
- 3. Data Services
- 4. Data Quality
- 5. DM Governance

Supporting Objectives

- Doctrinally driven
- Locate and retrieve
- Consistent, interoperable
- Quality and conformance
- Policies, procedures, resources, organization

DON IM&IT Strategic Plan

Goals

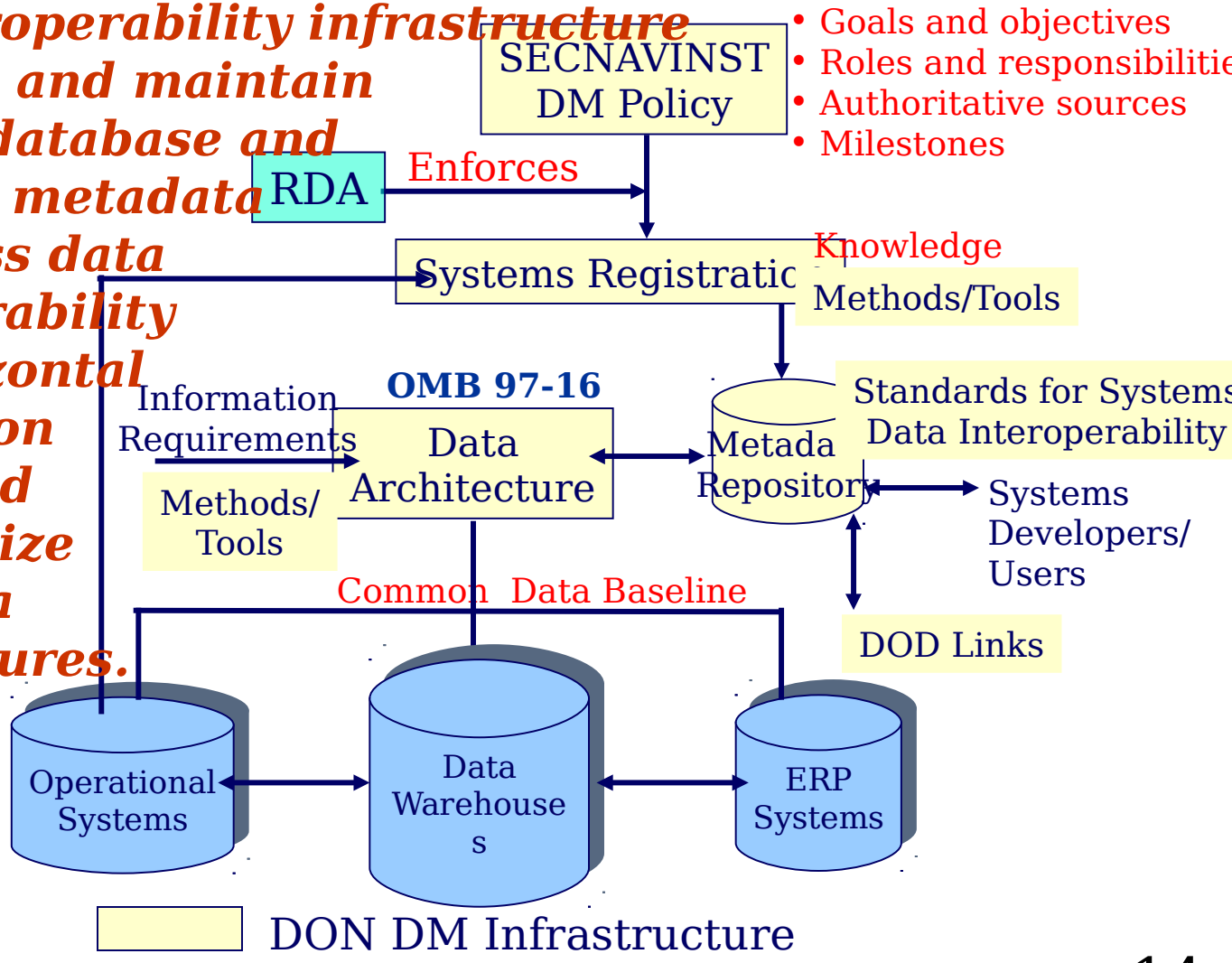
- 1. **IT Infrastructure**
- 2. Reengineer Processes
- 3. IT Investments
- 4. Knowledge Management
- 5. Emerging Technology
- 6. Information Assurance
- 7. Y2K
- 8. IM & IT Competencies
- 9. Information Culture

Supporting Objectives

- Architecture and Standards
- Strategic Plan, models, tools
- Process, tools, metrics
- Repositories, process, policy
- Identify, implement, innovate
- Strategy, policy, architecture
- Resolve, leverage lessons
- Core capabilities, career
- Outreach, best practices, tools and products

DON DM and Interoperability Infrastructure - Management and Engineering

Establish a DON data management and interoperability infrastructure to record and maintain systems database and interface metadata to address data interoperability and horizontal integration issues and synchronize DON data architectures.



Definitions

- **Data Management** is defined as the function that manages data as an organizational resource. It includes data administration as defined in DODD 8320.1.

- **Interoperability** is the ability of systems, units or forces to provide services to, and accept services from, other systems, units or forces, and to use the services so exchanged to enable them to operate effectively together (CJCS Pub 1-02).

DON IM&IT and DM Plan Alignment

Goals	Unify DON DM	Infrastructure	Processes/ Procedures	Services	Life-cycle Costs	Capital Planning
Infrastructure	✓	✓	✓	✓	✓	✓
Reengineer Processes	✓		✓		✓	
Investments	✓		✓		✓	✓
Knowledge Management	✓	✓		✓	✓	
Emerging Technology	✓		✓		✓	
Information Assurance	✓	✓	✓	✓		
Y2K Compliance	✓	✓				
IM/IT Competency	✓	✓		✓		
Culture	✓		✓	✓		✓

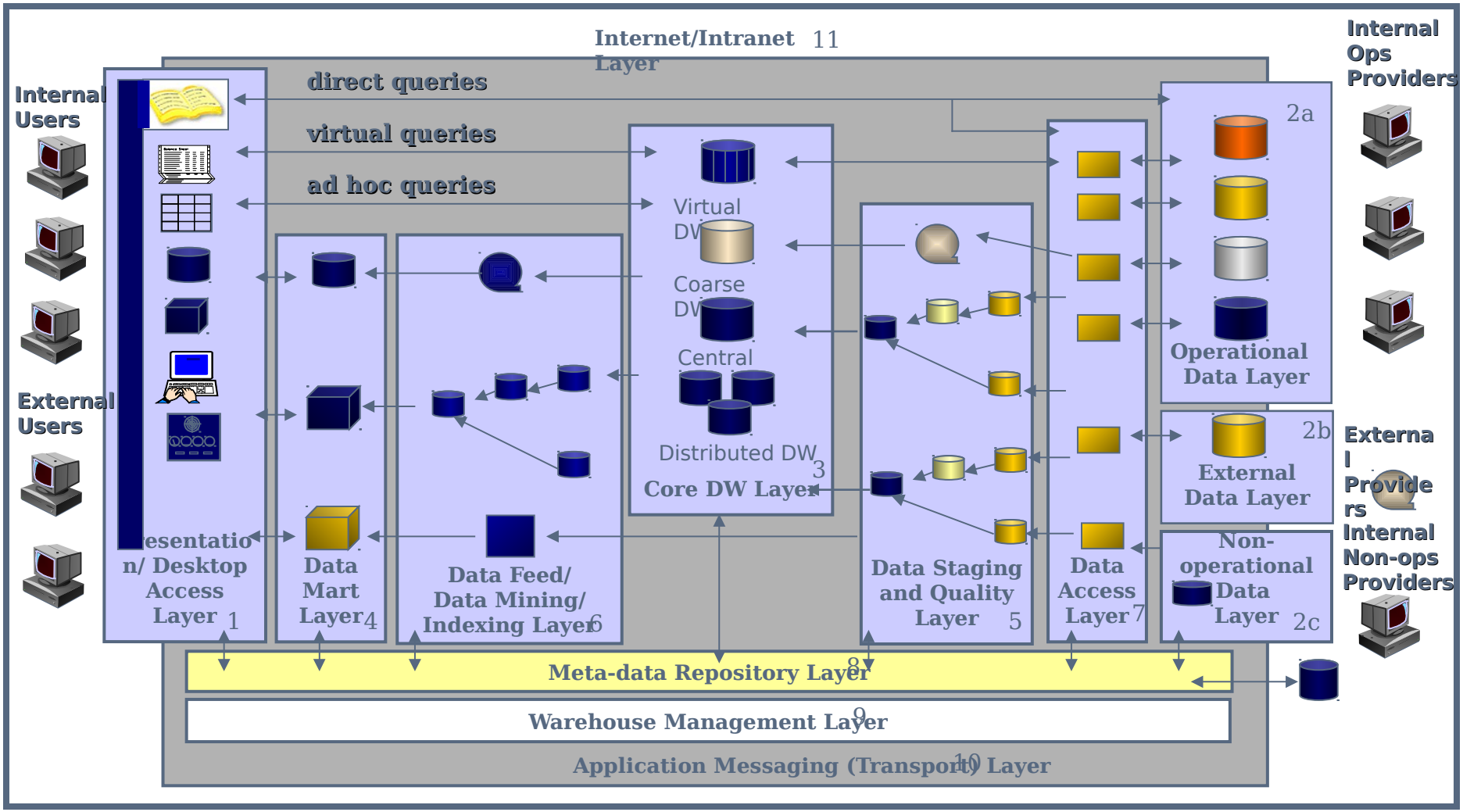
DOD and DON DM Plan Alignment

Goals	Unify DON DM	Infrastructure	Processes/ Procedures	Services	Life-cycle Costs	Capital Planning
Requirements	✓	✓	✓	✓	✓	✓
Availability	✓	✓	✓	✓		✓
Services	✓	✓	✓	✓		✓
Quality	✓		✓	✓	✓	✓
Management Governance	✓	✓	✓	✓	✓	✓

Metadata Repository

- **DON Metadata Repository Specification**
  - Purpose. A DON Metadata Repository is required to achieve data centric operations and life-cycle data cost savings. It provides the enterprise a common reference for data requirements, data availability, and data services as cited by DOD. Need cited in Chapter 8 of the DON ITSG document.
  - Scope. Provide for all functional areas, eg, C3I (includes combat systems), Logistics, Personnel, Medical, Finance, Acquisition. Consistent with the C4ISR architecture data model (CADM).

Enterprise Data Architecture



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DON Metadata Repository Products